## We claim:

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- 1. A substantially purified nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and complements thereof.
- 2. A substantially purified nucleic acid molecule that encodes a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
- 3. A transformed cell or organism comprising a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and complements thereof.
  - 4. The transformed cell or organism according to claim 3, wherein said cell or organism is a plant cell or plant.
- 5. The transformed cell or organism according to claim 4, wherein said cell or organism is a plant selected from the group consisting of cotton, wheat, maize, teosinte and soybean.
  - 6. A substantially purified protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
- 7. A purified antibody which is capable of specifically binding to a protein, wherein the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
  - 8. A transformed plant having a nucleic acid molecule which comprises: (A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule; (B) a structural nucleic acid molecule encoding a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86 and fragments thereof, and (C) a 3' non-translated sequence that functions in a

plant cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of the mRNA molecule.

- 9. The transformed plant according to claim 8, wherein said plant is maize.
- 10. The transformed plant according to claim 8, wherein said plant is soybean.
- 11. A transformed plant having a nucleic acid molecule which comprises: (A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule; which is linked to (B) a transcribed nucleic acid molecule with a transcribed strand and a non-transcribed strand, wherein the transcribed strand is complementary to a nucleic acid molecule encoding a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86; which is linked to (C) a 3' non-translated sequence that functions in plant cells to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of the mRNA molecule.
  - 12. The transformed plant according to claim 11, wherein said plant is maize.
- 15 13. The transformed plant according to claim 11, wherein said plant is soybean.